

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Rural Call Completion)	WC Docket No. 13-39
)	

REPLY COMMENTS OF COMCAST CORPORATION

Comcast Corporation (“Comcast”) and its affiliates hereby submit these reply comments in response to the Notice of Proposed Rulemaking (“*Notice*” or “*NPRM*”) released by the Federal Communications Commission (“FCC” or “Commission”) in the above-captioned proceeding.¹

I. INTRODUCTION AND SUMMARY

The record developed in response to the *Notice* demonstrates that many affected service providers currently cannot comply with the proposed rural call completion reporting requirements and that upgrading their systems apparently would be a costly undertaking. In light of this evidence, the Commission should carefully consider the need for and likely effectiveness of any reporting obligations and, if deemed necessary, narrowly tailor them to ensure that the requirements can be implemented with minimum expense and difficulty.

Moreover, there is widespread agreement in the record that the Commission should make certain that any reporting program will produce an accurate and complete record of a service provider’s rural call completion rate. Toward this end, the Commission should impose some limited reporting obligations on rural carriers, as well as tandem switch operators that are interconnected with rural carriers. The Commission also should assess a service provider’s call completion performance using the Network Effectiveness Ratio (“NER”), a metric that reflects

¹ *Rural Call Completion*, Notice of Proposed Rulemaking, 28 FCC Rcd 1569 (2013).

an originating service provider's call completion performance more accurately than the Answer Seizure Ratio ("ASR") the Commission proposes to use. Finally, in order to allow originating and intermediate service providers proactively to monitor and address call completion issues, the Commission should require rural incumbent local exchange carriers to make test lines available before any reporting obligations take effect.

II. ANY CALL COMPLETION REPORTING REQUIREMENTS SHOULD TAKE INTO ACCOUNT SERVICE PROVIDERS' TECHNICAL CAPABILITIES AND BE REASONABLY SIMPLE TO IMPLEMENT.

Numerous providers representing a wide cross-section of the industry filed comments explaining that the proposed call completion reporting obligations would be burdensome for them.² The Commission should be mindful of these concerns, and, if it ultimately decides to implement call reporting requirements, it should focus on adopting only those reporting requirements that are "practically and technically feasible" for the industry at large and can thus be implemented in a uniform manner by all originating service providers.³ While, as Comcast noted in its initial comments, Comcast already collects most of the call detail information

² See, e.g., Comments of COMPTTEL at 8 ("For originating providers that do not qualify for an exemption from the data retention and reporting requirements, compliance with these new information collection and retention requirements will be burdensome and expensive.") ("COMPTTEL Comments"); Comments of CTIA – The Wireless Association at 4-6 ("CTIA Comments"); Comments of Frontier Communications Corporation at 7 ("The record retention requirements necessitate major technological investments and changes.") ("Frontier Comments"); Comments of Sprint Nextel Corporation at 14 ("the costs of implementing and complying with the proposed regulations are estimated to be very high, and likely to exceed any purported benefits by a significant margin") ("Sprint Comments"); Comments of Verizon and Verizon Wireless at 8 ("these proposed rules would impose considerable burdens on providers") ("Verizon Comments"). (Unless otherwise indicated, all comments cited herein were filed in WC Docket No. 13-39 on May 13, 2013.)

³ Comments of the Alliance for Telecommunications Industry Solutions at 9 ("ATIS Comments").

proposed in the *Notice* for its originating interexchange calls,⁴ it is important that the requirements adopted are not unattainable or overly burdensome for most providers in order to avoid dispute and delay. The Commission's goals will best be served if all reporting providers are capable of furnishing the same information in the same format – an approach that will ensure consistency and thus facilitate analysis and comparisons across the entire network.

Moreover, the Commission should reject proposals to impose additional obligations that plainly would be onerous. For example, the Commission should not require providers to track, record, and report the reason for each call completion failure.⁵ In Comcast's experience, originating voice service providers typically are not able to track the path of a call after it has been handed off to a third-party long distance provider and, as a result, are not able to isolate the precise reason for a call's failure.⁶ The same technical limitations make it virtually impossible for originating providers to provide information regarding all intermediate providers in a call

⁴ If the Commission eventually requires carriers to report the proposed call detail information, the record supports Comcast's statement that such information is commercially sensitive and entitled to be treated as confidential under the Commission's rules. *See, e.g.*, Comments of CenturyLink at 12 ("CenturyLink Comments"); COMPTel Comments at 10 ("Call answer rate data and the number of calls made by its customers per month to the customers of different rural telephone companies is competitively sensitive information that originating long distance providers generally would not make available to the public."); Comments of Vonage Holdings Corp. at 8; Comments of Windstream Corporation at 3 ("Such data are considered confidential business information not available to the general public, and disclosure could affect carriers' standing in a very competitive long distance marketplace.") ("Windstream Comments").

⁵ *See, e.g.*, Comments of the National Association of Regulatory Utility Commissioners at 4 (May 8, 2013) ("NARUC Comments").

⁶ Comments of Bandwidth.com, Inc. at 8 ("Even if it is possible to obtain the call completion data through the chain of intermediate providers, it may be difficult to isolate whether and why a particular call failed . . .").

path.⁷ The originating provider may not even know the identity of subsequent intermediate providers.

The Commission also can minimize burdens by ensuring that the precise scope and content of any reporting obligations are clear well in advance of the initial submission date. Most notably, the Commission should expeditiously publish a definitive list of the rural operating company numbers (“OCNs”) covered by any reporting program it adopts. Doing so would aid in providing carriers sufficient time to “develop, implement, and maintain systems to distinguish between calls to rural OCNs and non-rural OCNs.”⁸

Finally, the Commission should sunset any reporting obligations it enacts as soon as its reforms to the intercarrier compensation regime “address the root causes of rural call completion problems.”⁹ As the United States Telecom Association recommends, “the Commission should carefully monitor the state of rural call completion and reduce or eliminate as soon as possible any obligations to submit data that it adopts as a result of the *NPRM* that become unnecessary due to the amelioration of the problem.”¹⁰ The record confirms that this sunset should occur no

⁷ See, e.g., Comments of Iowa Network Services, Inc. at 13-14.

⁸ CTIA Comments at 5. See also Comments of HyperCube Telecom, LLC at 5 (“[P]roviders do not currently distinguish other providers by OCN. The proposed rules will therefore require the development of costly new processes by affected providers . . .”). Parties also have noted aptly that a single unambiguous list is necessary to avoid “possibly . . . divergent or conflicting results being reported by different originating providers.” Comments of IntelPeer, Inc. at 4 (“IntelPeer Comments”). See also Windstream Comments at 2 (specifying which OCNs are characterized as rural “would facilitate the collection of comparable data across time periods and across the industry”).

⁹ *NPRM* ¶ 37.

¹⁰ Comments of the United States Telecom Association at 5.

later than the end of the prescribed transition to bill-and-keep and that reporting obligations may no longer be necessary at a much earlier point in the transition.¹¹

III. ANY CALL COMPLETION REPORTING MEASURES SHOULD BE DESIGNED TO CREATE AN ACCURATE PICTURE OF CARRIERS' CALL COMPLETION PERFORMANCE.

The Commission must ensure that any reporting measures it adopts will lead to the compilation of an accurate record regarding the completion of voice calls to rural areas. Accordingly, the Commission should analyze whether the proposed reporting threshold of 100 call attempts per OCN is high enough to provide the Commission with a sound sample size. Commenters raise serious concerns that the proposed threshold “would create less assurance that the Commission is receiving statistically meaningful data.”¹² In light of these concerns, the Commission may wish to examine, as other commenters have proposed, whether increasing the minimum number of call attempts necessary to trigger a reporting obligation “to a minimum of

¹¹ See, e.g., Comments of AT&T Inc. at 2 (“Any systemic problems with rural call completion resulting from the current access regime should disappear as the incentives to avoid high, rural terminating rates decrease.”); ATIS Comments at 8 (“the Commission [should] eliminate the new rules when they are no longer needed or at the end of the intercarrier competition report transition period, whichever comes first”); CenturyLink Comments at 19 (arguing that, if adopted, the Commission should consider the continuing need for any obligations at the beginning of each phase of the intercarrier compensation transition); Vonage Comments at 6-7 (recommending that the reporting requirements sunset “after a maximum period of two years because the economic incentives underlying these rural call completion issues will be sharply reduced within this timeframe as terminating access charges steadily transition to a bill-and-keep regime”).

¹² Windstream Comments at 2. See also ATIS Comments at 5 (“with a small number of calls proper statistical estimation of the difference between call completion to a particular OCN and overall call completion may be difficult”); Comments of Level 3 Communications, LLC at 15-16 (a low reporting threshold could lead to situations in which “a small variation in customer behavior or ILEC network problems . . . could push a provider from compliance into noncompliance”) (“Level 3 Comments”).

1000 would help buffer against results that falsely indicate the presence of rural call completion failures.”¹³

As Comcast noted in its initial comments, the Commission also should adopt some limited reporting requirements for rural carriers, as well as tandem switch operators that are interconnected with rural carriers. A wide array of commenters aptly notes that issues leading to call failures can occur at multiple points in the call path.¹⁴ As a result, imposing “reporting requirements on . . . terminating providers . . . could highlight, and allow the industry to address, all of the [non-originating] problems causing rural calls to not complete.”¹⁵

Such reporting obligations need not be burdensome. For example, a terminating service provider would need to file only a few key data points each quarter: the number of long distance calls delivered to the provider on a monthly basis; the number of calls completed to the called locations on its networks; and the monthly availability of local loops, end office switches, and, if applicable, tandem trunk groups.¹⁶ Consequently, the preparation of such reports would be relatively easy and the reports would yield valuable data that would allow the Commission to

¹³ Frontier Comments at 7. *See also* Windstream Comments at 2. A low reporting threshold would be particularly problematic if the Commission decided to base its call answer rate calculation on a metric such as the ASR. As Comcast noted in its initial comments, the ASR metric would classify some calls as failures even though there is no problem with the originating or intermediate service provider’s network. Accordingly, should the Commission maintain the 100-call reporting threshold, it is imperative that the Commission base its call answer rate on the NER metric. *See* discussion *infra* at Section IV.

¹⁴ *See, e.g.,* Comments of the California Public Utilities Commission at 4 (“Several service providers may play a role in the signaling and routing of a single call.”); CenturyLink Comments at 4; Level 3 Comments at 2-3 (“the causes of call completion problems are complex and often beyond a single provider’s control”).

¹⁵ IntelPeer Comments at 6.

¹⁶ Similarly, third-party tandem switching service providers that deliver traffic to rural exchanges should be required to furnish reports on the number of calls that they received each month destined for rural exchanges, the number of calls handed off to the terminating local exchange access providers, and tandem trunk group availability.

assess the network on an end-to-end basis and more accurately identify the source of specific rural call completion problems.

IV. THE COMMISSION SHOULD USE THE NETWORK EFFECTIVENESS RATIO TO MEASURE CALL COMPLETION PERFORMANCE.

The Commission has proposed to calculate call answer rates in a manner that mimics the industry's ASR metric, which considers a call to be successfully completed only when it is answered by the end user.¹⁷ The record, however, clearly favors the use of the NER metric for evaluating carriers' rural call completion performance. Unlike the ASR, the NER excludes end user behavior (*e.g.*, busy signals) and considers a call successful if it is correctly delivered to the call terminal.¹⁸ As the National Association of Regulatory Utility Commissioners notes, the NER "measures the ability of a network to deliver a call,"¹⁹ which is precisely the information the Commission is seeking in this proceeding.²⁰ Indeed, the Rural Associations, which clearly want to ensure that all legitimate rural call completion failures are accounted for under any reporting system, assert that use of the ASR-based metric proposed by the Commission "may

¹⁷ The ASR is calculated as follows:

$$\frac{\text{Seizures Resulting in Answer Signal}}{\text{Total Seizures}} \times 100$$

International Telecommunication Union, *ITU-T Recommendation E.425, Internal Automatic Observations*, at § 1.3 (2002), <http://www.itu.int/rec/T-REC-E.425-200203-I/en>.

¹⁸ The NER is calculated as follows:

$$\frac{\text{Seizures Resulting in Answer Message or User Failure}}{\text{Total Seizures}}$$

Id. at § 1.5.

¹⁹ NARUC Comments at 12.

²⁰ See, *e.g.*, News Release, *FCC Launches Rural Call Completion Task Force to Address Call Routing and Termination Problems in Rural America* (rel. Sept. 26, 2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-309841A1.pdf (noting that the FCC's aim is to address "[f]ailed or degraded calls [that] undermine the integrity of the nation's telephone networks . . .").

yield a ‘false positive’ with respect to rural call completion concerns when the reasons for differing completion rates arise out of user adoption preferences.”²¹

Whether the Commission ultimately decides to use the NER or an ASR-based metric, the Commission should exclude from its evaluation call types that have no bearing on the originating service provider’s ability to deliver a call to a particular rural location.²² Such call types include call attempts that show a “User” category release code, which represent calls that are properly terminated but then, for example, are not answered by the end user. The Commission also should exclude calls to toll free numbers because the originating provider has no control over the routing or quality of such calls.²³

V. RURAL CARRIERS SHOULD BE REQUIRED TO MAKE TEST LINES AVAILABLE BEFORE CALL COMPLETION REPORTING REQUIREMENTS TAKE EFFECT.

The Commission notes that it intends for the rules adopted in this proceeding to address situations in which “retail long-distance providers may not be adequately examining . . . call completion performance.”²⁴ While Comcast agrees that originating service providers should be actively monitoring the completion of their calls to rural areas, the FCC should also enlist the

²¹ Comments of the National Exchange Carrier Association, Inc., NTCA – The Rural Broadband Association, the Western Telecommunications Alliance, and the Eastern Rural Telecom Association at 15. *See also* Frontier Comments at 4 (“what counts for a ‘completed call,’ can serve to skew the determination of effective rural call completion”); Comments of Time Warner Cable at 10 (“the NER figure offers a more accurate and realistic measure of call completion issues than the call answer rate would”).

²² *See, e.g.,* CenturyLink Comments at 16 (“CenturyLink has serious concerns about the potentially distorted picture of call answer rates that will emerge, and the conclusions that may be drawn therefrom concerning the severity of the call completion issue, as a consequence of including in the reported data unanswered call attempts that are wholly unrelated to a long distance provider’s satisfactory delivery of calls to terminating local exchange carriers.”); Sprint Comments at 21 (“it makes no sense to hold a carrier responsible for call completion rates in situations in which it has no control over key variables”).

²³ Level 3 Comments at 11.

²⁴ *NPRM* ¶ 1.

assistance of terminating service providers in that effort. To that end, Comcast suggested in its initial comments that giving originating and intermediate service providers access to test lines in rural terminating areas would enable them proactively to test the reliability of their voice service to rural areas and take any necessary corrective measures.²⁵ The record demonstrates support for that proposal. As Verizon notes, the use of test lines “would provide an opportunity for an originating service provider . . . to identify any call failures *in real time* and for carriers on both ends of the call to troubleshoot shortly thereafter,” thereby allowing for “the resolution for the customer of any call completion issue [to] be more timely.”²⁶

Given the potentially significant advantages that access to test lines in rural areas offer, the Commission should require test lines to be in place for a meaningful period of time before any reporting obligations are finalized and commence. CenturyLink is correct in asserting that “[a]ny final rules adopted by the FCC concerning reporting, recordkeeping and data retention (or any other aspect of the rural call completion issue) should be based on verifiable facts and finding[s] drawn from well planned, controlled testing.”²⁷

VI. CONCLUSION

For the foregoing reasons, the Commission should ensure that any rural call completion reporting requirements it adopts are narrowly tailored and fairly simple to implement, design reporting measures that will result in an accurate view of the extent and causes of call completion

²⁵ In a related vein, the Commission should be supportive of efforts by rural carriers to work cooperatively with providers in addressing call completion concerns. Comcast, for example, has found that in most, but not all, instances rural carriers are willing to open a “trouble ticket” in order to facilitate the ability of both service providers to work together efficiently.

²⁶ Verizon Comments at 6-7. *See also, e.g.*, ATIS Comments at 4 (identifying call completion testing as one of the two primary areas the Next Generation Interconnection Interoperability Forum is working on to address call termination issues).

²⁷ CenturyLink Comments at 8.

issues, employ the NER to measure originating service providers' performance, and require rural carriers to make test lines available.

Respectfully submitted,

/s/ Kathryn A. Zachem
Kathryn A. Zachem
Mary McManus
Regulatory Affairs

Lynn R. Charytan
Brian A. Rankin
Andrew D. Fisher
Legal Regulatory Affairs

A. Richard Metzger, Jr.
Emily J. H. Daniels
LAWLER, METZGER, KEENEY & LOGAN, LLC
2001 K Street, NW, Suite 802
Washington, DC 20006

Attorneys for Comcast Corporation

COMCAST CORPORATION
300 New Jersey Avenue, NW, Suite 700
Washington, DC 20001
(202) 379-7134
(202) 379-7141

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